

## DOWN TO THE SEA WITH CHIPS

Yes, yes, I'm still here. Before you do anything else, please go get your copy of Apa-tech #28 and attach this so that when you do MC's I get some. It's been since issue 25 that I had anything in, but I'm not planning on dropping out. I've been very busy, but at the same time it seems to me that not a whole lot has been happening that is very interesting. I'm talkative enough that it won't stop me from rambling on for a short while, though.

First off is a change of address. It's about time I let you know about it, since we moved at the end of September. The new house is at 19 Quissett Ave., Woods Hole, MA 02543. Phone is the same (617) 540-3250. The move came about because the landlords put the barn and property up for sale. They wanted us out in September rather than having to chase us out in the winter or spring when no housing is available. The new house is much nicer and larger than the apartment. Six rooms and bath as opposed to two rooms and shower in the apartment. No longer is the bedroom just a loft bed over the laboratory. We even have the luxury of closets and a bathtub in this place. Oh, yes! My new lab has been completed and suitably christened with the first accidental dumping of five pounds of miscellaneous hardware all over the floor. One of the five days I took off of work for moving was used to build the lab bench structure in a downstairs room in the house. The other days were used packing and moving everything. The piano finally got moved a month after everything else did. It took that long to coordinate the weather, the truck, and the three other guys to help lift it.

The previous we is not a grammatical error. For those of you who aren't aware of it, I am engaged. The young lady's name is Bonnie Chapline. I met her a little over a year ago at a square dance in Woods Hole. We hit it off quite well together, she being crazy and I being insane. I don't know many other folks who've counted all the sheets on a roll of Scott tissue toilet paper to make sure they get all one thousand sheets. Bonnie was attending the University of Massachusetts at the Boston Harbor Campus at the time. She was living in West Newton (a suburb west of Boston) during the week and spending weekends on the cape with her mother and brother. She was staying free in a friends house using an enclosed, unheated porch as a bedroom and it wasn't uncommon for the temperature to drop below freezing on cold nights. After many months of seeing each other on weekends, the school year ended. Bonnie decided to move into the apartment with me at that point. We had figured that it took an average of three hours of commuting time each day to get to school, all of it wasted on public transit (you can't study while being jostled around on the "T"). Commuting to Boston on the bus a few times a week would take about four hours a day, but over two hours of that time could be used for doing homework. She effectively gained an hour a day by living in Woods Hole. Besides, Woods Hole is a much nicer place than Boston, summer or winter.

Round about July, (five minutes after we got home after Mike & Alice's wedding berserker, in fact) Bonnie took to wearing this rock on her finger. I think it looks kind of nice too. We haven't set a date yet, but we've decided that it will be some spring. We don't know if we will be in Woods Hole when we tie the knot either. After looking at prices in the area, it has become apparent that it will be impossible to purchase a home on the Cape.

The property that we had been renting an apartment on has been divided for sale. The barn that the apartment was in with about 4 acres of land has been put on the market for \$320,000. That much land would have been the right size for us. Anything resembling that size would probably be more, seeing as how at least an acre of the land consisted of the driveway to the barn. Little as I like the idea, it appears that we will be leaving WHOI and the Cape in a few years for parts more affordable.

Since September Bonnie has been doing the commute. The 8 a.m. labs were the worst. We had to get up at 5 a.m. to catch the bus in Falmouth, as it didn't come to Woods Hole that early. I had to get up because I still haven't taught Bonnie how to drive a standard transmission. For a while I was surprising everyone at work by being the first in on Wednesdays. Showing up at 6:30 instead of 8:30 got me in before everyone but the guards. Bonnie has since changed her major to education and dropped the class that had the early lab, so nerves aren't as frazzled as they were. The problem will undoubtedly show up again in the future. Hopefully Bonnie will have learned to drive a standard by then.

We got a new copier at work. It's a Canon, and it reduces, enlarges, collates, etc., and has only broken down once since we got it. The old Xerox machine (14 months when we removed it) was down an average of three days a week waiting for repairs. Another reason why Xerox is going down the tubes? Everyone loves the new machine save for a few of the secretaries that are too lazy to bother reading a new instruction manual and learning a new machine. Once again I'm doing things by cut, paste, and reduce to save thickness. Thin Apa's are nice, but only when they contain a lot of information.

Piglet (my Honda) is still running, albeit on three cylinders. We can't afford to have a valve job done to get the number two cylinder working again, and I don't think we would even if the money was around. The rust problem has gotten to the point that the frame is weakening. With all the other problems that are occurring, it probably wouldn't be a wise investment. I may be able to have the problem solved in a different way, as the auxiliary valve that is causing the problem can be pulled out through the top of the CVCC engine without ripping the entire engine apart. A quick, cheap fix might be available, but I rather doubt it. This week's new problem is that the passenger side door is refusing to shut properly. S'okay, there are two more doors to use before we get in real trouble!

I've been acting as a technician for Bonnie's family, fixing various items like TV's, stereos, and anything else that's broken. Keeps me in good with the future in-laws. Our own stuff has been falling apart at a fast enough pace that I seem to spend an evening or more a week fixing something or other. When the stuff I've had for years isn't falling apart, there's always something new on the shelves to be worked on. Not surprising, with my tendency to bring home homeless amplifiers and disowned instruments.

Last year I bought an old Centronics printer at the WHOI auction for \$10. When originally purchased in the early 70's, the cost was around \$2000. It doesn't have high quality printing, but

it is fast. The WHOI auction two months ago netted a few things of value. I picked up an HP-80 calculator (the financial version of the HP-35) for \$2, a digitizer for my computer for 25 cents (I hope to finally pick up the 3' x 4' tabletop next month), and a Canon T-50 automatic SLR camera without lens for \$1.75. The Canon was so cheap because it had fallen from 500' into a beach. One of the engineers at WHOI uses model airplanes to carry cameras. The planes are flown so as to photograph dyes and floats to observe tidal patterns and flows. During one such occasion, the pilot lost sight of the plane in the sun and pulled back on the control stick a little too hard in something resembling a panic. The rubber bands holding the wings on snapped, and the fuselage made like a dart for the beach below. After a 500 foot plunge, it buried itself 18 inches into the beach, camera and all. The camera was sent out for repair but was returned as being uneconomical to repair. The store offered \$10 for it for salvage of the parts. When I got hold of it it took me two hours of work to strip it down, clean the sand out, and put it back together. The camera works fine now! The sand had jammed the auto-winder, causing the batteries to be loaded down to the point where the electronics couldn't function. Once the sand was out, the systems all worked fine as the day they came out of the box. With the 28mm lens I have on a somewhat permanent loan from one of the folks at work I now have a second camera system around the house for snapshots! I'm going to try writing an ad for Canon sometime soon to see if I can get a few free lenses out of the story.

The same auction netted a Bell & Howell 16mm projector for a quarter. The amount of salt spray that the machine took while it was on the ships years ago, and the fact that it was just stored away without cleaning may make the machine unrepairable, but I hope that some work with Scotchbrite will clean things up properly. I'm hoping I can get it working, as I got a 16mm camera and editing stand at a local flea market for \$10 last week. With my computer and the graphics support programs that are starting to show up I should be able to do rather nice titles for 16mm films. The four \$20 projector bulbs in the box of spare parts will make up for my quarter's investment if the projector can't be repaired.



Several Months ago I picked up a high quality Conrac monitor for \$3. The only problem is that it would cost \$35 to get the manual for it from Conrac. I need the manual because the unit had a 1029/60 line rate and I am digging into the circuitry to change it back to the standard 525/60. I've gotten the frequency for the horizontal oscillator modified, but the sync circuit is working funny - putting the left margin off the edge of the tube face. I'm running blind without schematics, and I'm not that familiar with monitor operation. WHOI never had any books for the unit - do any of you have any contacts that might? The unit is a Conrac model SNA 17/N. I'd appreciate any info you might have.

My Centronics printer had some problems last month. A wire broke on the printhead assembly, apparently due to moving, and a 7404 IC burned out on one of the boards. It took several hours to fix the problems, but I'm once again able to use it.



## The Breadboarder

The current project at work I'm on is BASS (Benthic Acoustic Stress Sensor). I have to restructure & redesign the computer system for in-situ processing of the data. The revisions include adding a hardware multiply/divide unit to the 1802 for 16 bit math, a real-time clock for synchronizing the data of the two tape storage systems, and a new high speed CMOS A/D converter, plus re-doing the entire I/O structure of the system. I have a little under three months. There are four of the systems to be modified once the designs are done. Reducing power consumption by a factor of 10 to 50 is included in the task as well. It's not an easy problem, but I'm coming along on it.

We finally got our first frost of the year on December 7th followed by several days of above 50 weather. The trees seemed to think that spring had come again - several of them between home and work started budding. We got our first snow the evening of the 23rd and only four inches at that. The lateness of the weather never fails to amaze me. Being surrounded by ocean causes a lag in weather of about two months. On the other hand monsoon season lasts through May, with summer not really showing up until late June or early July.

Issue 23 comments:

Greg: It's good to know that Jittlov is finally getting somewhere about doing his features. The only problem I see is that once he makes "Wizard..." into a feature, no union member will work with him - if he actually puts down on film what he's told folks he will. I'm really waiting for his successes to put him in a position where

he can really do up "Speed". When last I heard, it was this film that he was pushing as his first feature. Magic is sure to be seen from him - if he doesn't starve first. Please continue to print whatever news you get from him or about him. // Where did the friendly space people come from? Are you a secret Rosecrucian? Thieving from their newsletter? // That picture of the Phoenix rocket looks suspiciously like some of the photos I remember seeing in a book in my high school library (including the numbers E42). The book was chock full of color photos of heavy lift vehicle with dozens of motors around the rim. I took the book out about twice a year just to look at the pictures. I don't recall the title or author, but it was about 5" x 7" with a center section of 20 - 40 pages of color pics.



"Hi. Me, master. You, tool."

#### Issue 24:

Rod: Hi-fi may have reached the limit of human discernment years ago, provided you were willing to pay more for your stereo than your house. Advances in technology have brought it within the reach of reasonable budgets now. To reach the limits today, you must still expect to spend close to \$2K. Most of that goes not into the processing electronics, but the transducers at either end of the system. The recording medium is the biggest limiter to fidelity today. Cassettes and albums are fairly poor. Two track 1/4" tape running at 15 ips or better comes real close but the machines to use it are neither convenient nor inexpensive. CD looks to have all the range we're likely to need for a read-only audio storage medium for the future. Smaller and cheaper and more convenient is the big drive that is present, not fidelity.

Bill H.: The database question was kinda fuzzy on purpose - I was trying to find out what people could or would use a database for that I had the capability to do with my computer. I just didn't do a good job of asking the question. There hasn't been enough interest or response to justify my thinking about it any more. I have started putting together a pile of TRS-80 Model 100 programs that folks can get from me. It's not a really a database, just a bunch of BASIC programs and some communications software so I can download programs directly or through a modem. I have to be on this end to run things, though.

#### Issue 25:

Greg: I've found that a word processor within easy reach provides me with the opportunity to do even better than the less than N letter writing concept. It also allows me to communicate with more people in the time I have available. This Christmas, many friends and relatives got a letter from me instead of a Christmas card. It was cheaper than buying cards, and provided more than the average card for the reader, I think. But the discourse of it also provided the bulk of the what's happening section for this Apa contribution. Using a base letter, it was easy to create multiple edits for two different target groups - one being mostly older relatives who are not technologically oriented, the other being for the Apa crowd. There are some folks in the Apa who will be getting both, as I wanted to send a card of some sorts to several folks but lacked the money. The card got printed on one page of green and one page of red paper.

Donna: The problem of not having enough money for your wedding may be easy enough to solve. The big expense that I've remembered reading about is the cost of the reception. I have also heard about potluck receptions being a big success. The key seems to be getting enough close friends and relatives together to have a good time. Most of the folks I know that you would probably be inviting would be more than happy to pitch in at an affair of this sort. The only folks I know of who would turn their noses up at the idea are the traditional wedding establishment type - caterers, florists, churchies (apologies to the devout), hall renters, etc. And they're not the ones you'd want to invite anyway! // The suggestion for the savings account seems to have some merit, but the party idea shouldn't be mixed into it at all. It may cause more hassle to deal with the account than it would be worth. Earlier this year my bank instituted a \$1 per month service charge on savings accounts of less than \$200. I get the feeling that it won't be my bank much longer.

Greg: Are you going to be doing any of the controlling of the satellite that you said was planned for STS-11? Are you going to throw a big party down at mission control and stick the GT logo all over the consoles? // 300 kWh? We've been using around fifty a month. We have gas heat, water, and cooking though. We're paying \$380 plus utilities per month for the new house.

Jamie: I believe that the current releases of CD disks use the tellurium and other semi-stable compounds. I recall reading that the disks degrade over time, to the point where 15 to 20 years is the expected lifetime. Have you heard anything about it in the various audio magazines? // We have RATFOR up and running on the NEC (it compiles itself or something like that). Can we arrange to get that graphics stuff to me some time? Can I also get a copy of the 3d 10 digit accuracy orbit calculator?

I've run out of time and I haven't even caught up to issue 26 (August). Next issue I'll catch up. See you then.